III REMARKS

Summary of Applicant's Invention

Applicant's invention relates to a method of displaying, as a map and a series of graphs on a web page, information about visitors to web pages on the Internet, or viewers of streaming video, for the purpose of monitoring, in real-time, the geographical distribution of visitors viewing advertisements in cyberspace.

A server places ads on a public web page accessible to Internet visitors. The ads are placed in accordance with an ad campaign strategy of an advertiser. Data that includes ad impressions, IP addresses of visitors and geographical data including locations of IP addresses of the visitors are supplied to a program. The program separates the enhanced data into site-specific data and advertiser-specific data. The site-specific data and a site-specific program are transferred to a private web page accessible to the site. The site-specific program dynamically plots indicia representing ad impressions for a site included in the site-specific data on a map on the private web page accessible to the site. The advertiser-specific data and an advertiser-specific program are transferred to a private web page accessible to the advertiser. The advertiser-specific program dynamically plots indicia representing ad impressions for the advertiser included in the advertiser-specific data on a map on the private web page accessible to the advertiser. A visual characteristic (color, size, intensity etc.) of an indicium is changed in proportion to a number of the Internet visitors from the same geographical location.

Claim Rejections -35 USC 101

Claim 2 was rejected as directed to non-statutory subject matter. Applicant's amendments to claim 2 submitted herein are believed to render the rejection moot. For example, the added limitation "said advertiser data subset being fed from said first cache to the advertiser-viewpoint program in response to a request from an advertiser administrator" and other added limitations provide the functional language referred to by the Examiner as being absent from claim 2.

Claim Rejections-35 USC 103

Claims 2-6 and 8-20 were rejected under 35 USC 103 as unpatentable over Boyd 6,112,238 in view of the Dolinar article and Blake 5,752,264.

Boyd-6,112,238

Boyd discloses an Internet-based system, method and storage medium embodying computer-readable code for analyzing traffic data in a distributed computing environment. Boyd teaches a method for analyzing traffic data in a distributed computing environment. Boyd does not teach an information provider storing latitude and longitude coordinates of a visitor's geographical location, information that is crucial to applicant's invention. This is because its stated purpose is to continuously collect and summarize access information from traffic data hits 11 while allowing on-demand, ad hoc analyses. As shown in Figure 1 of Boyd, access information is collected from traffic data hits 11 and summarized by the server 10 into analysis results 18A-C (block 21 of Figure 2), as further illustrated in Figure 6.

Dolinar

Dolinar discloses a graphical information system (GIS) in which each record is attached to a location on a map. For example address information is translated into coordinates of latitude and longitude and then plotted as "data points" on a map.

Dolinar is cited by the examiner to supply the missing elements of Boyd of an information provider storing latitude and longitude coordinates of a visitor's geographical location. Dolinar discloses a graphical information system (GIS) in which each record is attached to a location on a map. Address information is translated into coordinates of latitude and longitude and then plotted as "data points" on a map.

Blake-5,752,264

Blake discloses a multi-processor system in which a CPU data fetch must encounter a cache miss at both the CPU's level one cache (L1) and the CPU cluster's level two cache (L2) in order to necessitate a shared main memory bus access. If a CPU needs to modify a

data unit, it first looks for the unit in its L1 cache. If the data unit is not among the units stored in the L1 cache, an L1 cache miss occurs and a L2 cache data request is generated. The L2 request is sent to L2 cache, which then searches its directory for the requested data. If a L2 cache miss occurs, the L2 cache retrieves the data from system memory via a shared memory bus and then sends the requested data to the CPU that requested it. If the L2 cache is holding the requested data, it simply sends the data to CPU and no shared bus access is required.

Summary of Arguments for Patentability

Boyd discloses a method for analyzing traffic on the Internet. Dolinar discloses a graphical information system (GIS) in which each record is attached to a location on a map. Address information is translated into coordinates of latitude and longitude and then plotted as "data points" on a map. Blake discloses a memory accessing structure in a multi-processor system using two intermediate cache levels, L1 and L2, between the CPU and the main memory.

Viewed together as a combination the three references cited by the Examiner disclose a method for analyzing traffic on the Internet (Boyd) in which a graphical information system (GIS) in which each record generated by the traffic analysis of Boyd is attached to a location on a map (Dolinar). The address information is translated into coordinates of latitude and longitude and then plotted as "data points" on a map (Dolinar), and the operation is speeded up by storing data in two caches by a memory accessing structure in a multi-processor system using two intermediate cache levels, L1 and L2, between the CPU and the main memory (Blake) to save time by reducing the access required to the memory bus (of Boyd).

In contradistinction, applicant's invention relates to a method of displaying, in real-time, as a map and a series of graphs on a web page, information about visitors to web pages on the Internet, or viewers of streaming video, for the purpose of monitoring, in real-time, the geographical distribution of visitors viewing particular advertisements in cyberspace placed on web pages by a particular advertiser. There is no teaching in the references as to how one would know that a

web page hit contains an ad that the advertiser placed. This is the function of the ad server, which has the advertiser and ad, the site name etc.

The references taken alone or combined do not disclose or suggest separating collected data into per site and per advertiser data sets and processing a data subset to display, in real-time on a web page, indicia on a map, the indicia being located on the map according to geographical locations of Internet visitors.

Detailed Argument for Patentability

<u>Claim Rejections - 35 USC § 103(a)</u>

Examiner has rejected claims 1-6 and 8-20 under 35 U.S.C. 103(a) as being obvious over <u>Boyd</u> in view of <u>Dolinar</u> and <u>Blake.</u>

Claim 1 has been previously canceled.

Claim 2 (as amended) is an independent claim and claims 3-6 are dependent thereon.

Claim 8 is an independent claim and claims 9-11 are dependent thereon.

Claim 12 is currently canceled and incorporated in to claim 8.

Claim 13 is an independent claim and claims 14-15 are dependent thereon.

Claim 16 is an independent claim and claims 17-20 are dependent thereon.

None of the references disclose or suggest applicant's claimed invention because combined they do not disclose nor suggest <u>all</u> of necessary elements of the claimed combination. Applicant's claims 2-6 call for "an ad server and "an advertising display server". The advertising display server collects the data from the ad server and separates the data into two caches, one containing a per-advertiser data subset (data selected from the advertiser's perspective), the other containing a per-site data subset (data selected from the site's perspective). Claims 8-20 are method claims in which the data are separated into two caches, one containing a per-advertiser data subset (data selected from the advertiser's perspective), the other

containing a per-site data subset (data selected from the site's perspective). None of the references disclose or suggest separating data into user-specific data; and using the user-specific data with a user-viewpoint program in order to plot, i*n real-time* on a map on a private web page, indicia representing Internet visitor's access to ad impressions.

The <u>Boyd</u> system (Figure 1) employs a single web server (10) that gathers access information about each user by observing and logging the traffic data packets exchanged between the web server (10) and the user (12). Important facts about the users can be determined directly or inferentially by analyzing the traffic data. Traffic data collected over a period of time yields statistical information, such as the number of users visiting the site each day, what countries, states or cities the users connect from, and the most active day or hour of the week. <u>Boyd</u> does not suggest displaying the data collected on a map <u>in real-time</u> on a web page.

<u>Boyd</u> does not have the concept of an information provider and an advertising display server having stored in two caches, data subsets separated from data collected from said ad server and said information provider, a first of said caches having stored therein a per-advertiser data subset, a second of said caches having stored therein a per-site data subset. This structure is what enables the display *in real-time* indicia on a map on a web page, the indicia being located on the map according to geographical locations of Internet visitors.

<u>Boyd</u> only teaches analyzing data hits to a web site. Applicant's claims require that locations of visitors to a web site on the Internet be plotted on a map *in real-time*.

<u>Dolinar</u> only teaches that data *records* can be plotted at coordinates on a map. Applicant's claims require that *locations of visitors* to a web site on the Internet be plotted on a map *in real-time*.

<u>Blake</u> only teaches buffering methods in a multi-processing system to speed up access to memory. Applicant's claims require that locations of visitors to a web site on the Internet be plotted on a map *in real-time*.

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The distinguishing language in the claims is as follows:

Claim 2 (as amended) and dependent claims 3-6:

> said advertiser data subset being fed from said first cache to the advertiser-viewpoint program in response to a request from an advertiser administrator;
>
> said site data subset being fed from said second cache to said site-viewpoint program in response to a request from a site administrator;
>
> said advertiser-viewpoint program and said site-viewpoint program processing a respective data subset to display in real-time on a private web page indicia on a map, said indicia being located on the map according to geographical locations of Internet visitors.

Claim 8 and dependent claims 9-10:

> B. Separating said collected data in real time into two subsets, a per-advertiser data subset, and a per-site data subset;
>
> ***
>
> D. Selectively feeding said per-site data subset to said site-viewpoint program and said per-advertiser data subset to said advertiser-viewpoint program.

Claim 13 and dependent claims 14-15:

> A. Receiving over the Internet user-specific data related to visitors of Internet web sites upon which ads have been placed on a public web page
>
> ***

B. Plotting in real-time indicia representing ad impressions for a site included in said user-specific data on a map on a private web page.

Claim 16 and dependent claims 17-20:

B. Separating said enhanced data into user-specific data; and,

C. Transferring said user-specific data and a user-viewpoint program to a private web page accessible to said user;

Said user-viewpoint program plotting in real-time indicia representing ad impressions for a site included in said user-specific data on a map on said private web page.

Applicant's invention is a method and apparatus of displaying, as a map and a series of graphs on a web page, information about visitors to web pages on the Internet, for the purpose of allowing advertisers to monitor in real-time, the geographical distribution of visitors viewing advertisements on the Internet.

Applicant's invention is a combination and the crucial suggestion or motivation criterion in determining obviousness must be considered. Neither Boyd nor Dolinar nor Blake contain anything to suggest the desirability of applicant's claimed combination or any motivation to modify the method of Boyd to effectuate a method of displaying, in real-time on a web page, information about visitors to web pages on the Internet, for the purpose of monitoring, in real-time, the geographical distribution of visitors viewing advertisements in cyberspace. In order to satisfy this requirement, the Examiner must show that at least one of the references suggests that it is possible or desirable to modify the applied reference to effectuate a method of displaying, on a web page, information about visitors to web pages on the Internet, for the purpose of monitoring, in real-time, the geographical distribution of visitors viewing advertisements in cyberspace.

Examiner has rejected claims 8-12 under 35 U.S.C. 103(a) as being obvious over <u>Boyd</u> in view of <u>Dolinar</u> and <u>Blake</u> and further in view of *Official Notice*.

The Examiner is relying not on an additional reference, but on personal knowledge ("official notice") to supply elements of applicant's claims that are not shown or suggested by the references. Applicant respectfully traverses the use of official notice in this instance and requests that the Examiner provide evidence to back up this position in the next Office action or explain why no evidence is required.

The example given by the Examiner under item 11 of the Office Action in respect of the a website administrator for GEindustrial.com "may want to know how many new users signed up on the site and the number of hits received by a banner ad posted on the webpage" etc. is essentially a restatement of the object of applicant's claimed invention as stated in the specification:

> It is desirable that an advertiser on the Internet knows where in the physical world
> a particular banner ad is being viewed. It is also desirable that an advertiser be
> able to determine that visitors to the Internet in a specific geographical location
> have viewed its ad.

The references do not teach "hits received by a banner ad" as set forth in Examiners Official Notice example. See the following excerpt from <u>Boyd</u>:

> The method 20 consists of two routines. Access information is collected from
> traffic data hits 11 and summarized by the server 10 into analysis results 18A-C
> (block 21), as further described below with reference to FIG. 6. The access
> information is separately analyzed for generating the summaries 19A-C which
> identify trends, statistics and other information (block 22), as further described
> below with reference to FIGS. 9A and 9B. The collection and summarizing of the
> access information (block 21) is performed continuously by the server 10 while

the analysis of the access information (block 22) is performed on an ad hoc basis
by either the server 10 or a separate workstation (not shown). (col. 4. Lines 19-33)

There is no teaching in the references as to how one would know that a web page hit
contains an ad that the advertiser placed. This is the function of the ad server in applicant's
claims. The ad server is defined in applicant's specification as follows:

> An ad server and geographical query provider (information provider) provide, in
> real time, an IP address, latitude and longitude coordinates of a visitor's
> geographical location, the domain name, *the advertiser and ad*, the site name,
> price paid for the ad and other visitor-related information. An advertising display
> server collects the data from the ad server and sorts the data into two caches, one
> containing a per-advertiser data subset (data selected from the advertiser's
> perspective), the other containing a per-site data subset (data selected from the
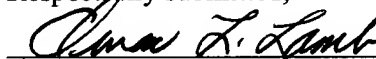> site's perspective).

None of this is shown in the prior art.

Realizing how very complicated this subject matter is, applicant has attempted to clarify
the claims by this amendment. Should the Examiner have further objections to the claims a
telephonic interview with applicant's attorney at (928) 776-8037 is respectfully requested.

In view of the above arguments for patentability, reexamination of claims 2-6, 8-11 and
13-20 pending in this application and allowance thereof is respectfully requested.

Respectfully submitted,

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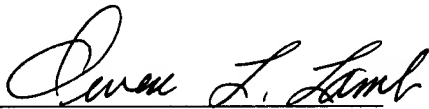Postal Service as First Class Priority Mail in an envelope addressed to:

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on August 22, 2007

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